LIST OF CONTENTS

VOLUME 15 (1989)

Number 1

A. Doble and M. L. Perrier	1	Pharmacology of excitatory amino acid receptors coupled to inositol phosphate metabolism in neonatal rat striatum
Lia Prado de Carvalho	9	Modulation of acetylcholine release in rat striatal slices by muscarinic receptors which do not desensitize
Yukio Yoneda, Kiyokazu Ogita, Kisa Yamada, Tomoko Kouda, Takao Ohgaki, Shuji Uchida and Haruo Meguri	17	High concentrations of calmodulin antagonists inhibit accumulation and binding activities of [^{3}H]glutamate in rat brain
P. T.-H. Wong, H. S. Lee, C. H. Tan and W. L. Teo	25	Specific [^{3}H]tryptophan binding sites in rat brain
Masaaki Hirouchi, Ryozo Kuwano, Takashi Katagiri, Yasuo Takahashi and Kinya Kuriyama	33	Nucleotide and deduced amino acid sequences of the $GABA_A$ receptor α-subunit from human brain
P. P. De Deyn, B. A. Pickut, A. Verzwijvelen, R. D'Hooge, W. Annaert and W. P. De Potter	39	Subcellular distribution and axonal transport of noradrenaline, dopamine-β-hydroxylase and neuropeptide Y in dog splenic nerve
R. M. Dawson, P. J. Gray, C. M. Upsher and S. Michaelson	49	Modification of the kinetic properties of Triton-solubilized rabbit brain acetylcholinesterase by allosteric effectors at low ionic strength
Katsumichi Takeda, Fumiaka Uchiumi, Masatoshi Takita and Takeshi Kato	55	A rapid enzyme immunoassay for cholectystokinin octapeptide sulfate
Anthony Heape, Françoise Boiron and Claude Cassagne	61	High uptake and rapid metabolism of palmitate in peripheral nerves of normal and Trembler mice *in vivo*: similarities and differences
Christopher J. Fowler, Cora O'Neill, Per Almqvist, Sofie Nilsson, Birgitta Wiehager and Bengt Winblad	73	Muscarinic receptors coupled to inositol phospholipid breakdown in human SH-SY5Y neuroblastoma cells: effect of retinoic acid-induced differentiation
Sherwin Wilk and Elizabeth K. Wilk	81	Pyroglutamyl peptidase II, a thyrotropin releasing hormone degrading enzyme: purification and specificity studies of the rabbit brain enzyme
G. F. Dunglison, P. A. Wilce and B. C. Shanley	91	Autoradiographic studies on the effect of ethanol on muscarinic receptors in rat brain
Alejandro M. Dopico, Luis M. Zieher, José Mayo, Noe Altschüller, Juan J. López and Guillermo Jaim-Etcheverry	97	Long-term changes in noradrenaline (NA) and dopamine (DA) contents of rat cerebellum following neonatal X-irradiation
L. F. Agnati, K. Fuxe, M. Ruggeri, E. Merlo Pich, F. Benfenati, V. Volterra, U. Ungerstedt and I. Zini	107	Effects of chronic treatment with uridine on striatal dopamine release and dopamine related behaviours in the absence or the presence of chronic treatment with haloperidol

Paula Rosario, Ana Barat and Galo Ramirez — 115 Characterization of binding sites for [^{3}H]GABA in *Drosophila melanogaster* CNS membranes

121 Book Reviews

125 News Items

Number 2

Jacqueline M. Evans and Gerald Cohen — 127 Commentary: Can trace amounts of neurotoxins destroy dopamine neurons?

Darryle D. Schoepp — 131 Protein kinase C-mediated inhibition of excitatory amino acid-stimulated phosphoinositide hydrolysis in the neonatal rat hippocampus

Yukio Yoneda and Kiyokazu Ogita — 137 Characterization of quisqualate-sensitive [^{3}H]glutamate binding activity solubilized from rat adrenal

Bertrand Lambolez, Claude-Marguerite Deschamps and Jean Rossier — 145 Interactions of benzodiazepines and β-carbolines with a histidine residue of the benzodiazepine receptor

K. Gulya, D. Budai and P. Kása — 153 Muscarinic autoreceptors are differentially affected by selective muscarinic antagonists in rat hippocampus

Z. Rakonczay, P. Kása and J. R. Wolff — 157 Change in the distribution of acetylcholinesterase molecular forms in the rat superior cervical ganglion after NaBr treatment *in vivo*

M. Garcia-Gil, E. Tongiorgi, M. Cattani, G. Cipollini and M. Brunelli — 161 cAMP-dependent protein phosphorylation of a 79 kDa protein in segmental ganglia of the leech *Hirudo medicinalis*

N. Morel, M. Israel, M. Synguelakis and G. Le Gal la Salle — 169 Identification of two proteolipid antigens with different localization at *Torpedo* neuromuscular synapses

Paul Madtes Jr, Geoffry Fuller and Kathleen Gregg — 179 Sensitivity of GABA-displaceable [^{3}H]muscimol binding depends upon the composition of the buffering medium

Christina M. Hall and Jan-Olof Karlsson — 185 Aleuria lectin remains bound to its receptors during rapid axonal transport in retinal ganglion cells

Rosemary J. Wilkinson and David G. Nicholls — 191 Compartmentation of glutamate and aspartate within cerebral cortical synaptosomes: evidence for a non-cytoplasmic origin for the calcium-releasable pool of glutamate

S. J. Taylor, J. Haggblad and S. A. Greenfield — 199 Measurement of cholinesterase activity released from the brain "on-line" and *in vivo*

A. Garzon-Aburbeh, A. W. Lipkowski, D. L. Larson and P. S. Portoghese — 207 Transfer of fatty acyl groups from membrane phosphatides to opiate ligands

C. Charriere-Bertrand, G. le Prince, C. Bouchier, C. Fages, M. Tardy and J. Nunez — 215 Expression of tubulin, GFAP and of their encoding mRNAs during the proliferation and differentiation of cultured astrocytes

Alessandro Poli, Ottavio Gandolfi, Paola Roncada, Tiziana Guarnieri, Roberta Lucchi and Luigi Villani — 223 Reversible effects of 1-methyl-4-phenylpyridinium ion (MPP^+) on dopaminergic neurons in goldfish retina

T. J. Montine and T. L. Sourkes — 227 Behaviour of α-methylserotonin in rat brain synaptosomes

R. J. Huxtable, S. Crosswell and D. Parker — 233 Phospholipid composition and taurine content of synaptosomes in developing rat brain

Ambrish J. Patel, Anthony Hunt and Jozsef Kiss — 239 Neonatal thyroid deficiency has differential effects on cell specific markers for astrocytes and oligodendrocytes in the rat brain

Masako Hagihara, Kennichiro Fujishiro, Akira Takahashi, Makoto Naoi and Toshiharu Nagatsu — 249 A Rapid Publication: Cyclosporin A, an immune suppressor, enhanced neurotoxicity of N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) to mice

255 News Items

Number 3

257 Editorial

Anna Starzec, Mohieddine Moumni, Gisèle D'Angelo-Bernard, Yannick Lerrant, Marian Jutisz and Raymond Counis — 259 Cyclic AMP enhances gene expression, synthesis and release of newly synthesized alpha and luteinizing hormone beta subunits in cultured rat anterior pituitary cells

Chen Chen, Jin Zhang, Govindan Dayanithi, Jean-Didier Vincent and Jean-Marc Israel — 265 Cationic currents on identified rat gonadotroph cells maintained in primary culture

B. Sion, E. Saint Dizier, J. Duval and M. L. Thieulant — 277 Steroid receptors and regulation of LH and secretogranin II (GP87) secretion in pituitary cell aggregates

Bernardo Pensa, Marco Achilli, Mario Fontana, Anna Maria Caccuri and Doriano Cavallini — 285 *S*-Aminoethyl-L-cysteine transaminase from bovine brain: purification to homogeneity and assay of activity in different regions of the brain

Marshall K. Cheung — 293 The specificity of glutamate inhibition of protein synthesis in synaptosomal fractions from rat cerebral cortex

Marika Eller and Jaak Järv — 301 Kinetics of *N*-methylscopolamine interaction with muscarinic receptor from rat cerebral cortex

A. Kenessey, M. Banay-Schwartz, T. DeGuzman and A. Lajtha — 307 Regional distribution of brain calpastatin and of calpain II. Activity with casein and with endogenous brain protein substrates

Makoto Naoi, Tsutomu Takahashi, Hasan Parvez, Ryosuke Kabeya, Eiich Taguchi, Keiko Yamaguchi, Yoko Hirata, Masayasu Minami and Toshiharu Nagatsu — 315 *N*-Methylisoquinolinium ion as an inhibitor of tyrosine hydroxylase, aromatic L-amino acid decarboxylase and monoamine oxidase

Georges Vauquelin, Jacques De Keyser, Banyingela Kanyinda and Maurice Vanhaelen — 321 (±)Tetrahydroanisocycline and (±)tetrahydropalmatine binding to D1 and D2 dopaminergic receptors in human putamen

N. A. Sharif, J. L. Nunes, A. D. Michel and R. L. Whiting — 325 Comparative properties of the dopamine transport complex in dog and rodent brain: striatal [^{3}H]GBR12935 binding and [^{3}H]dopamine uptake

C. Moret, I. Pastrie and M. Briley — 333 Effects of scopolamine treatment and lesion of the nucleus basalis upon various cholinergic markers in the rat brain cortex

Phillip J. Robinson, Donald R. Gehlert, Enrico Sanna and Ingeborg Hanbauer — 339 Two fractions enriched for striatal synaptosomes isolated by percoll gradient centrifugation: synaptosome morphology, dopamine and serotonin receptor distribution, and adenylate cyclase activity

Rainer Schwitzkowsky and László Hetey — 349 Characterization of synaptosomal dopamine release in rat and human brain after post-mortem storage and cryopreservation

M. K. Gaitonde and Elizabeth Murray — 355 The effect of conditions of homogenization on the activity of pyruvate dehydrogenase and its stability in brain homogenates

Yoshiyuki Ohmori and Kinya Kuriyama 359 Negative coupling of γ-aminobutyric acid $(GABA)_B$ receptor with phosphatidylinositol turnover in the brain

A. J. Cholewinski, J. C. Reid, A. M. McDermott and G. P. Wilkin 365 Purification of astroglial-cell cultures from rat spinal cord: the use of D-valine to inhibit fibroblast growth

371 Book Reviews

375 News Items

Number 4

Claudia Martini, Rossella Pacini, Gino Giannaccini and Antonio Lucacchini 377 [^{35}S]TBPS binding to purified benzodiazepine–GABA–ionophore receptor complex: the effect of GABA on the modulation exerted by benzodiazepine site ligands

Lois Winsky, Hiroyasu Nakata and David M. Jacobowitz 381 Identification of a calcium binding protein highly localized to the cochlear nucleus

S. C. R. Lummis and D. B. Sattelle 391 Insect nervous system [^{3}H]saxitoxin binding sites: characterization and target size

Giuseppe Arienti, Giuseppe Fratto, Gian Luigi Piccinin, Maria Teresa Ramacci, Licia Pacifici, Mariangela Rossi and Lanfranco Corazzi 397 Valproic acid and bicuculline affect the formation of glycerolipid in rat brain

Andrzej Szutowicz, Hanna Bielarczyk, Danuta Sosnowska and Barbara Ciszek 403 Regulation of citrate metabolism and acetylcholine synthesis by Ca^{2+} in rat brain synaptosomes

M. Thereza R. Perez and Berndt Ehinger 411 Multiple neurotransmitter systems influence the release of adenosine derivatives from the rabbit retina

Junya Tanaka, Kunitoshi Tada, Masatoshi Takeda, Shiro Hariguchi and Tsuyoshi Nishimura 421 Effect of metallic cations and pH on reassembly of glial fibrillary acidic protein

P. C. Hopkins, I. S. Kay and W. E. Davies 429 A rapid method for the determination of taurine in biological tissue

R. Grimaldi, C. G. Eriksson, P. Eneroth, L. F. Agnati and K. Fuxe 433 Evidence for nuclear ornithine decarboxylase activity in different brain regions of the male rat

Hélène Fournier and Roger F. Butterworth 439 Effects of maternal thiamine deficiency on the development of thiamine-dependent enzymes in regions of the rat brain

H. Lara and J. Belmar 445 Biochemical evidence for the presence of small and large noradrenergic storage vesicles isolated from cat ovary in isoosmotic conditions. Distribution of dopamine-β-hydroxylase activity

Riccardo Ghidoni, Amelia Fiorilli, Marco Trinchera, Bruno Venerando, Vanna Chigorno and Guido Tettamanti 455 Uptake, cell penetration and metabolic processing of exogenously administered GM1 ganglioside in rat brain

Itaru Toyoshima, Akio Yamamoto, Osamu Masamune, Shoji Yamada and Mei Satake 467 Difference in phosphorylation of neurofilament proteins in motor neurons and spinal ganglion cells

Bernadette Earley, Anat Biegon and B. E. Leonard 475 Quantitative autoradiographic analysis of muscarinic receptors and quantitative histochemistry of acetylcholinesterase in the rat brain after trimethyltin intoxication

Gary A. Walter and John W. Phillis 485 5-Aminoimidazole-4-carboxamide riboside administration and purine release from the hypoxic/hypotensive rat cerebral cortex

Rie Miyoshi, Shozo Kito, Hajime Ishida and Mika Nakashima — 493 Modulation of dopamine D1 receptor binding by neurotensin in the rat striatum

Masazumi Takeshita, Satoshi Yoshida and Toshitsugu Yubisui — 497 Concomitant decrease in the elongation and condensation activities of very-long chain fatty acyl-CoA in jimpy mouse

Q. Pei, T. Zetterström and M. Fillenz — 503 Measurement of extracellular 5-HT and 5-HIAA in hippocampus of freely moving rats using microdialysis: long-term applications

A. Szabó, J. Nemcsók, P. Kása and K. Gulya — 511 Muscarinic cholinergic components in the carp brain

Philippe Mailly, Amena Ben Younès-Chennoufi and Suzanne Bon — 517 The monoclonal antibodies Elec-39, HNK-1 and NC-1 recognize common structures in the nervous system and muscles of vertebrates

D. Maysinger, B. Zorc, B. R. Leavitt, I. Butula, F. L. Chubb and A. C. Cuello — 531 Structural analogs of hemicholinium: effects on cholinergic and GABAergic markers in the CNS

Jeffrey H. Boatright and P. Michael Iuvone — 541 GABA and the regulation of serotonin *N*-acetyltransferase activity in amphibian retina—I. Effects of GABA agonists and antagonists

Jeffrey H. Boatright and P. Michael Iuvone — 549 GABA and the regulation of serotonin *N*-acetyltransferase activity in amphibian retina—II. The role of dopamine

Toshikuni Sasaoka, Norio Kaneda, Yoshikazu Kurosawa, Keisuke Fujita and Toshiharu Nagatsu — 555 A Rapid Publication: Structure of human phenylethanolamine N-methyltransferase gene: existence of two types of mRNA with different transcription initiation sites

Jerzy Z. Nowak and Ewa Zurawska — 567 A Rapid Publication: Serotonin N-acetyltransferase (NAT) activity in hen retina and pineal gland: *in vivo* pharmacological induction at noon and antagonism of the light-evoked suppression at night

575 Book Review

577 News Items